

MISCELLANEOUS.

ALCHEMILLA FISSA, A. CONJUNCTA, AND A. ARGENTEA.

To the Editors of the Annals of Natural History.

GENTLEMEN,—I observe in the 'Flora Danica,' pl. 2101, published in 1834, a good representation of *Alchemilla fissa*, the same plant which was published last year by Mr. Babington in vol. x. of the 'Annals of Natural History' under the name of *A. conjuncta*, and which I gathered in the Faroe Islands in 1821, and printed in my list of the plants of those islands in 1835 under Don's name, *A. argentea*.

The specimen figured in 'Fl. Dan.' is stated to have been gathered in the Faroe Islands by Dr. Forchhammer, whom I accompanied in a tour of those islands in 1821, on my return from which by Copenhagen in the same year, I submitted the herbarium which I had collected to Professor Horneman (editor of 'Flora Danica'), and gave him various specimens, amongst others some of this plant, which he at that time, I believe, considered only a variety of *A. alpina*.

The description given in the 'Flora' is—" *Alchemilla fissa* (Schumel) fol. reniform. 7—9-lobis, lob. profundis, obovatis, inciso-serratis, basi integerrimis, corymbis terminalibus. Mertens et Koch, Flor. Germ. i. p. 830; Schummel in Centur. Silesiac. 9. n. 2; Sturm, Fl. Germ. fasc. 56; Horneman, Fl. Econom. ed. 3. p. 802 et Suppl."

It appears therefore, that if Don's specific name *A. argentea* is not to be retained, Schummel's *A. fissa* has the claim of priority.

I remain, Gentlemen, yours faithfully,

Oxford, June 8, 1843.

W. C. TREVELYAN.

On the Affinities of Glareola torquata. By E. Blyth, Curator to the Museum of the Asiatic Society of Bengal.

HAVING had the good fortune to procure alive a specimen of this bird, I was able at a glance to perceive its true affinities, which heretofore had constantly puzzled me, in common, I believe, with every student of zoology who has bestowed attention on the classification of birds. Linnæus arranged this bird as *Hirundo pratincola*; and Baron Cuvier included its genus among his *Echassiers*, or Stilt-birds, viz. the *Grallatores*, or "Waders" of modern English systematists; remarking—"Nous terminerons ce tableau des échassiers par trois genres qu'il est difficile d'associer à d'autres, et que l'on peut considérer comme formant séparément de petites familles." The three genera adverted to are, *Chionis*, *Glareola*, and *Phœnicopterus*; which are associated also by M. Temminck in his heterogeneous assemblage of odds and ends, styled by him *Alectorides*. Now, of these three genera, the first, or that of the Sheathbill (*Chionis*), has been satisfactorily referred by M. de Blainville, on anatomical data, to the immediate proximity of *Hæmatopus*, an association of which the propriety is readily seen when once suggested*; and on similar data I

* Allied to *Chionis* are the remarkable genera *Attagis*, d'Orbigny, and *Tinochorus*, Vieillot, from the South American Cordilleras, and the anatomy of these equally refers them to the same systematic station. Vide 'Zoology of the Voyage of the Beagle' under Captain Fitzroy.

have long been satisfied that the Flamingoes (*Phænicopterus*) should be ranged among the *Lamellirostrès* or *Anatidæ*, a position which has also been assigned to them by Mr. Swainson: this latter author, in common with most of the recent British writers on ornithology, has referred the Pratincoles to the *Charadriadæ* or Plover family, associating them more immediately with *Cursorius*; but Mr. Jenyns (in his 'British Vertebrata'), really as if selecting the most *outré* position he could find, has included this genus in his *Rallidæ**! There, too, Mr. Yarrell (in his 'British Birds') has followed him in grouping it; but this naturalist was so fortunate as to obtain an egg of our present species, which he has figured, and remarks, that "the Pratincole has been arranged by some authors with the Swallows, by others near the Rails; but I believe, with Mr. Selby, that it ought to be included in the family of the Plovers; and had I known its plover-like habits and eggs sooner, I should have arranged it between *Cursorius* and *Charadrius*." The figure of the egg which he has given, however, appears to me to accord still better with my view of the affinities of this genus. Several years ago, Mr. Gould called my attention to the fact that the Collared Pratincole had a slightly-pectinated middle claw, and suggested to me whether, after all, the great Swedish naturalist was not right, at least in bringing this bird among the *Insessores Fissirostrès* of Vigors; but at that time I inclined to hold a different opinion, and so far as the structure in question is concerned, that alone could scarcely influence the systematic position of the genus, as it occurs in widely separated families†; and as I have further always held the opinion that the *Pressirostrès* and *Longirostrès* of Cuvier (corresponding to the *Charadriadæ* and *Scolopacidæ* of modern English systematists) composed but a single great series, essentially distinct from the *Cultrirostrès*, Cuv. (vel *Gruidæ* et *Ardeadæ*) which the illustrious French zoologist interposed between the former, an analogous conformation was not wanting in that series, as instanced by the Black-tailed Godwit (*Limosa melanura*), while no trace of it occurs in the Bar-tailed Godwit (*L. fedoa*). Examining, however, the entire foot of a recent Pratincole, it will be seen that the resemblance it bears to that of *Caprimulgus* extends to the peculiar scutulation, to the general form of the toes, and especially to the circumstance of the back-toe being directed inward; and whoever has witnessed the creeping gait of a British Moth-hunter (*Caprimulgus*) on the ground, will not fail to recognise in that of the Pratincole an exact similarity: moreover, many species of *Caprimulgus* have the tarse as much elongated as in *Glareola*, and I have been informed that certain of these assemble numerously on the mud-flats near the shores of some of the West India islands, where their habits would appear to resemble those stated of the Pratincoles. The mode of flight, too, of the latter is

* I need not ask what character it has in common with the Rails, but rather what it has not in direct and obvious opposition to them?

† *E. g.*, in many *Caprimulgidæ*, *Ardeadæ*, and *Pelicanidæ*; its intent being apparently to cleanse the *rietus* from such fish-scales, &c. as may adhere thereto, or, in the instance of the *Caprimulgidæ*, to detach the legs of beetles which may ditch, and thus impede the bird's swallowing them.

absolutely that of the Moth-hunters, and not by continuous flap-pings, as in all the *Charadriadæ*. But what first led me to perceive the affinity which this genus bears to *Caprimulgus*, was the expression of the physiognomy of the living bird, as I held it in my hand, and, to descend to particulars, the semi-tubulate form of its *nares*, and downward curvature of the short bill seen alike in both, though the latter is so much larger and stouter in *Glareola*; then, looking to the feet, the similitude was at least equally striking, while the form of the wings and tail, and mode of flight, were such as might be expected to occur in a diurnal modification of the family *Caprimulgidæ*, and together with the wide gape helped to remove this genus from the grallatorial order altogether. Even the egg, as figured by Mr. Yarrell, has not the pointed form at one end, characteristic of those of the Snipe and Plover series; but would appear to resemble nearly that of a *Caprimulgus*, in shape as well as in markings. On the other hand, the discrepancies of *Glareola* with any of the varied forms of nocturnal *Caprimulgidæ** are sufficiently obvious externally, while internally there are some very strongly marked differences; such as the configuration of the sternum, which is doubly emarginated posteriorly, and otherwise more approximates to the form of this important portion of the skeleton of the *Charadriadæ*, while the tongue also is broad and flat, with a thin serrated tip, and the muscular coat of the stomach is considerably developed,—particulars at variance with the type of *Caprimulgidæ*, but which I only now briefly advert to, since I have not lately procured an example of the latter family with which to institute an anatomical comparison. Upon the whole, I have arrived at the opinion that the Pratincoles are more nearly related by affinity to *Caprimulgidæ* than to any other family in the class, but I hesitate as to whether they should be actually included therein, though, if so, I think that they should be regarded as at least constituting a very distinct subfamily, apart from the nocturnal genera, and thus I incline provisionally to arrange them.—*Journal of the Asiatic Society of Bengal*, No. 41. p. 467.

LINES ADDRESSED TO THE REV. W. KIRBY, M.A.

The following verses, communicated by our valued correspondent, Henry Denny, Esq., are so beautiful, and so well adapted for the recommendation of our pursuits, that we make no apology in presenting them to our readers.

To the Rev. William Kirby, M.A., F.R. & L.S. &c. &c.

I know not which to envy most,
 Thy knowledge of the Insect host,
 Tenants of earth or air;
 Or thy acquaintance with each scene
 Of barren heath, or meadow green,
 To which their tribes repair.
 The first has cast around thy name
 A purer and a happier fame

* *Caprimulgus*, *Ægotheles*, *Podargus*, *Steatornis*, *Nyctibius*.

Than e'er was won by arms ;
 The second must have taught thy heart
 Somewhat of wisdom's better part,
 Through nature's hidden charms.

For well I ween a heart like thine
 Contemplating the hand divine
 Thy favourite science shows,
 Taught by each proof of power and love,
 To HIM who dwells and reigns above
 With grateful feeling glows.

And such a feeling to extend,
 To show how skill and goodness blend
 Throughout Creation's plan,
 Must rank amongst those wise pursuits
 Whose genuine and whose grateful fruits
 Are bless'd of God and man.

Yes, every science, love, or art
 Which tends to foster in the heart
 Knowledge of nature's laws,
 Must, sanctified by grace divine,
 "Precept on precept, line on line,"
 Exalt their First Great Cause !

Pursue, then, my ingenious friend,
 Thy search ; and mayst thou in the end
 Partake a prouder change
 Than e'er thy insect tribes can know,
 Whate'er of beauty these may show
 In transformations strange !

For these, though plumed with splendid wings,
 Are still but fair and fragile things,
 Which seem but born to die ;
 Whilst thou, thy web of knowledge spun,
 Shalt soar above yon glorious sun
 To immortality !

Woodbridge, July 1829.

BERNARD BARTON.

LETTERS FROM RAY TO SIR HANS SLOANE.

On the appropriation of certain Birds to their proper Classes in Ornithology.

[MS. Sloan. Brit. Mus. 4056. fol. 148. *Orig.*]

SIR,—I received yours of the 17th and am very glad that the Box with the Papers is come safe to your hands, though I did not much fear the losse of it. You need not be solicitous about the charge, for there was nothing extraordinary, and yet if there had, I ought in all reason to have born it.

Two things there are I cannot yet fully agree with you in.

1. The referring of the Old-men, or Rain-fowls, to the Cuckow. For the Cuckow is so strange, anomalous, and singular a Bird, and

so remarkable, and taken notice of even by the vulgar, for his voice, manner of breeding, and absconding all winter, that I think no Bird that agreeth not with him in these particulars ought to be joyned with him. Neither is the length of the tail a sufficient argument; for the Yunx, a genuine Woodpecker, hath a tail as long in proportion to his body, and marked with crosse-bars too.

2. In referring the Savanna-bird to the Lark-kind. For that distinction of Small Birds into slender and thick-bill'd, or as our Fowlers phrase it, into soft and hard-beak't, dividing the numerous genera of them almost equally, is of such eminent use for the clear understanding and ranking of them, that I think it ought by no means to be rejected, or the Birds of those kinds confounded, though the places they frequent and their shape and manner of living may agree; and that characteristick note of the Lark-kind may be common to some of them, I mean having a very long back-claw or spur. I have taken notice of some that agree with Larks in these particulars, as the Bunting and a sort of Mountain Finch. Yet I believe that there is a difference in the diet of those Birds. For the slender-bill'd, though they feed upon the pulp and grains of fruits, yet they seldome meddle with dry seeds unlesse driven by hunger. But the hard-bill'd touch not pulpy fruits, but feed upon dry seeds, as all sorts of grain and thistles, &c. To feed upon Insects is common to them both.

Your opinion or conjecture upon the Rabihorcado's being a kind of fork-tail'd Larus or Sea-swallow, I very much approve, and agree with you in. I fancied that they were no palmiped Bird, because those that write of them wonder that they should be found so far out at Sea. Which is no wonder in a Larus.

My Wife salutes you with the tender of her very humble service. The ulcers upon my leg, which I thought had been perfectly healed and dried up, continuing well all Winter, are this Spring broken out again and become very troublesome and painfull. They puzzle my Philosopher, and I am at some losse how to order them.

I am, Sir, your very affectionate friend and humble servant,

B. N. April 23, —94.

JOHN RAY.

The difficulty which a Botanist has to encounter who has not seen the Plants he has to describe, growing in their natural places.

[Ibid. fol. 155. *Orig.*]

SIR,—I received your very kind letter of June 6^t, and long after the acceptable present of your Book: for which I return you many thanks. I cannot but admire your industry and patience in reading and comparing such a multitude of Relations and Accounts of Voyages, and referring to its proper place what you found therein relating to your subject, and that with so much circumspection and judgement. You have done Botanists great service in distributing and reducing the confused heap of names, and contracting the number of Species. But who is able to doo the like? No man but who is alike qualified, and hath seen the things growing in their natural places. For my own part I doe freely acknowledge myself altogether insufficient for such a task, having not seen the plants themselves,

nor of many of them so much as dried Specimens, and of the rest having had but a transient view. I shall therefore put down what I find in late writers, viz. Plukenet's Phytography; the remaining six volumes of Hortus Malabaricus; Father Plumier; Schola Botanica; Paradisi Batavi prodrom.; Floræ Batavæ Flores; Tournefort's Elem. Botan.; Breynius his two Prodrumi; and, above all, your Catalogue and History of the Plants of Jamaica and the neighbour Islands, which you are pleased so frankly to offer me the use of, without interposing my own judgement. Did I live about London, and had I opportunity frequently to visit the Physick Gardens thereabouts, and to observe and describe the new species, I might make a better Supplement to my History than now I shall do, my circumstances not admitting so long an absence from this place. I have been lately very ill and indisposed with a hoarseness and violent cough, attended with a feverish heat, of which I am not yet fully recovered. I hope you are well, and pray for your health. My wife sends her very humble service. I must owe myself to be much obliged to you, and am, Sir,

Your very affectionate friend and humble servant,

Black Notley, June 23, —96.

JOHN RAY.

METEOROLOGICAL OBSERVATIONS FOR MAY 1843.

Chiswick.—May 1. Cloudless; cold and dry. 2. Fine. 3. Very fine. 4. Cloudy and fine: rain. 5. Rain: cloudy: constant and very heavy rain at night. 6. Heavy rain: clear and cold at night. 7. Clear and fine: showery: frosty at night. 8. Hazy: heavy rain. 9. Drizzly: cloudy. 10. Slight haze: clear and cold at night. 11. Light haze: clear. 12, 13. Very fine. 14. Cloudy and fine: heavy rain at night. 15, 16. Rain. 17. Heavy showers. 18. Densely overcast: cold rain. 19. Rain: cloudy. 20. Cloudy: showery: heavy rain at night. 21. Fine: heavy rain: clear and cold at night. 22. Heavy showers. 23. Cloudy: lightning with rain at night. 24. Heavy rain: clear. 25. Cloudy and fine. 26. Rain. 27, 28. Showery. 29. Hazy. 30. Light haze: very fine: showery. 31. Cloudy and mild.—Mean temperature of the month 3° below the average. The quantity of rain was greater than that which has fallen in any month within at least the last seventeen years.

Boston.—May 1, 2. Fine. 3. Cloudy. 4. Fine. 5. Cloudy: rain early A.M. 6. Rain: rain A.M. and P.M. 7. Cloudy. 8. Cloudy: rain P.M. 9—11. Cloudy. 12. Fine. 13. Cloudy: rain P.M. 14. Fine. 15. Rain: rain P.M. 16. Cloudy: rain early A.M. 17. Cloudy. 18, 19. Cloudy: rain early A.M. 20. Cloudy. 21. Cloudy: rain early A.M.: rain P.M. 22. Fine. 23. Cloudy: rain A.M. 24. Windy: rain A.M. 25. Fine: rain A.M. 26. Fine. 27. Fine: rain, with thunder and lightning P.M. 28, 29. Fine. 30. Fine: halo round the sun 11 A.M. 31. Cloudy: rain early A.M. This has been the wettest May we have had since 1830.

Sandwick Manse, Orkney.—May 1. Fine: fog. 2. Cloudy: fog. 3. Clear: cloudy. 4. Rain: cloudy. 5. Cloudy: clear. 6. Clear: cloudy. 7. Rain: cloudy. 8. Clear. 9. Clear: cloudy. 10, 11. Clear: fine. 12—14. Cloudy. 15—17. Clear. 18. Cloudy: fine. 19. Cloudy: showers. 20. Bright: clear. 21. Bright: cloudy. 22—24. Bright: clear. 25. Rain. 26. Cloudy. 27. Damp. 28. Cloudy: sleet-showers. 29. Snow-showers: sleet-showers. 30. Bright: fine. 31. Clear: fine.

Applegarth Manse, Dumfries-shire.—May 1—3. Fair and fine. 4. Fair till P.M.: rain. 5. Heavy showers. 6. Fair and fine. 7. A shower. 8, 9. Fair. 10, 11. Fair: hoar-frost. 12. Fine: rain P.M. 13. Fine and mild. 14. Fine, but cloudy. 15. Showers. 16. Cloudy and cold. 17. Cool: cloudy. 18. A shower. 19. Cold. 20. Cold: fair. 21. Cold: wet. 22. Milder, but showery. 23. Mild: cloudy. 24. Cold and rainy. 25. Soft rain. 26. Mild: showers. 27. Mild: showery. 28. Cold and rainy. 29. Clear: heavy rain. 30. Soft: growing: thunder. 31. Wet all day.

